

CUSTOMER NUMBER 27792

INFORMATION DISCLOSURE STATEMENT LISTING SHEET

Information Cited By Applicant(s) That May Be Material To The Prosecution Of The Subject Application

Applicant:

Andrew Wilson

Attorney Docket No. MICR0485

Serial No.:

10/814,761

Group Art Unit: 2877

Filed:

March 31, 2004

Examiner:

Title:

DETERMINING CONNECTEDNESS AND OFFSET OF 3D OBJECTIONS

RELATIVE TO AN INTERACTIVE SURFACE

U.S. PATENT DOCUMENTS

*Examiner	-		_			Sub-
<u>Initial</u>	ĪD	Document No.	Date	Name	<u>Class</u>	<u>Class</u>
<u>/YH/</u>	US1	4,992,650	02/12/1991	Somerville	235	462

FOREIGN PATENT DOCUMENTS

NONE CITED

*Examiner Initial	Document No.	Document Information
<u>/YH/</u>	01	"3.6 Interpolation in Two or More Dimensions." Numerical Recipes in C: The Art of Scientific Computing. Chapter 3. Interpolation and Extrapolation. © 1988-1992, Cambridge University Press. Numerical Recipes Software. pp. 123-128.
	02	"Bar Code 1, 2-Dimensional Bar Code Page." Available http://www.adams1.com/pub/russadam/stack.html . Printed 01/20/2004. 14pp.
	O3	Ambiente article. "InteracTable®." Dated 07-Jul-2k. Available http://www.darmstadt.grnd.de/ambiente/activities/interactable.html . Printed 11/21/2003. 3pp.
	04	Bier, Stone, Pier, Buston, and DeRose. "Toolglass and Magic Lenses: The See-Through Interface." <i>Proceedings of Siggraph '93</i> (Anaheim, August). <i>Computer Graphics Annual Conference Series</i> , ACM, 1993, pages 73-80. 8pp.
	O5	Blickenstorfer, Conrad H. "First Look: Acer TravelMate TM100 with Windows XP Tablet PC Edition." Pen Computing Magazine. July 2002. pp. 44-47.
<u> </u>	O6	"DiamondSpin - Begs for Direct Manipulation Technology Is it the Pen? Sony Leaps Out-of-the-Box Again with Gummi." Mitsubishi/DiamondSpin. CHI 2004 #3. Printed 4/30/2004. 5pp.

*Examiner Initial	Document No.	Document Information
<u>/YH/</u>	O7	Dietz and Leigh. "DiamondTouch: A Multi-User Touch Technology." UIST '01 Orlando FLA. © ACM 2001 1-58113-438-x/01/11. CHI Letters 3 (2). November 11-14, 2001. pp. 219-226.
+	O8	Electronic Check Alliance Processing, Inc. "Gift Cards, How Stored Value Card Systems Work." Available. http://www.electron-cap.com/GiftCards.htm . Printed 1/20/2004 and 05/16/2004. ©2003. 2pp. total (3pp printed).
	O9	Fukuchi and Rekimoto. "Interaction Techniques for SmartSkin." ACM UIST2002 demonstration, 2002. 2pp.
+	O10	Grabowski, Robert. "A Miniature Video Laser Range Finder for Small Robots." Available http://www.andrew.cmu.edu/~rjg/research/research_hardware/laser_rangefinder.html . Printed 5/16/2004. 8pp.
	O11	Grant and Winograd. "Flexible, Collaborative Organization on a Tabletop." ACM CSCW 2002: Workshop on Colocated Tabletop Collaboration: Technologies and Directions. New Orleans, LA. November 2002. pp. 1-4.
	O12	Hom, Berthold K. P. "Robot Vision." The MIT Press. Available http://mitpress.mit.edu/catalog/item/default.asp?ttype=2&tid=8388 . Printed 12/17/2003. 6pp. total.
<u> </u>	O13	Horn, Berthold Klaus Paul. "Robot Vision." Binary Images: Topological Properties. The MIT Electrical Engineering and Computer Science Series. 1986. pp. 66-71 and cover page(s).
	O14 .	Hunter, Andrew. "Connected Components Analysis (Computer Vision)." www.google.com/search?sourceid=navclient&q=connected+component+ellipse . Printed 3/7/2004. Article dated 09/24/2002. 2pp search results, 21pp article.
	O15	"IR Distance Sensor." Available http://www.diyelectronics.com/Accessories/GP2D05.html (1pg). Printed 12/30/2003. 3pp.
	O16	Ishii and Ullmer. "Tangible Bits: Towards Seamless Interfaces between People, Bits and Atoms." <i>Proceedings of CHI '97</i> , March 22-27, 1997, Atlanta, Georgia. © 1997 ACM 0-89791-802-9/97/03. pp. 1-8.
	017	Ishii, Wisneski, Orbanes, Chun, and Paradiso. "PingPongPlus: Design of an Athletic-Tangible Interface for Computer-Supported Cooperative Play." <i>Proceeding of CHI '99</i> , May 15-20, 1999, © 1999 ACM. pp. 1-8.
	O18	Johanson, Kolodny, and Russell. "A Hand pose and Position Tracker for the Interactive Table." CS223B Final Project. Available http://graphics.stanford.edu/~drussel/vision/tracker-report.html . Printed 12/16/2003, 6pp.
+	O19	Ju, Hurwitz, Judd, and Lee. "CounterActive: An Interactive Cookbook for the Kitchen Counter." Extended Abstracts of CHI 2001, Seattle. April 2001. pp. 269-270.
	O20	Kang, Sing Bing. "Radial Distortion Snakes." IAPR Workshop on Machine Vision Applications (MVA2000), Tokyo, Japan. November 2000. pp. 603-606.
	021	Kato, Billinghurst, Poupyrev, Imamoto, and Tachibana. "Virtual Object Manipulation on a Table-Top AR Environment." <i>IEEE and ACM Int'l Symposium on Augmented Reality 2000, ISAR'2000, October 5-6, 2000, Munich.</i> 9pp.
	022	Klemmer, Newman, and Sapien. "The Designer's Outpost: A Task-Centered Tangible Interface for Web Site Information Design." <i>Proceedings of Human Factors in Computing Systems: CHI 2000 Extended Abstracts</i> . The Hague, The Netherlands. April 1-6, 2000. pp. 333-334.
	O23	Klemmer, Newman, Farrell, Bilezikjian, and Landay. "The Designers' Outpost: A Tangible Interface for Collaborative Web Site Design." CHI Letters, The 14 th Annual ACM Symposium on User Interface Soft Technology: UIST 2001. 3(2). pp. 1-10.
+	O24	Kobayashi, Hirano, Narita, and Ishii. "A Tangible Interface for IP Network Simulation." <i>CHI 2003</i> , April 5-10, 2003, Ft. Lauderdale, FL ACM 1-58113-630-7/03/0004. 2pp.
<u></u>	O25	Koike, Sato, and Kobayashi. "Integrating Paper and Digital Information on EnhancedDesk: A Method for Realtime Finger Tracking on an Augmented Desk System." <i>ACM Transaction on Computer-Human Interaction</i> , Vol. 8 No. 4, December 2001. © 2001 ACM 1073-0516/01/1200-0307. pp. 307-322.

		OTHER INFORMATION
*Examiner	Document	Document Information
<u>Initial</u>	<u>No.</u>	
<u>/YH/</u>	026	Leibe, Starner, Ribarsky, Wartell, Krum, Singletary, and Hodges. "The Perceptive workbench: Toward Spontaneous and Natural Interaction In Semi-Immersive Virtual Environments." <i>Proceedings of the IEEE Virtual Reality 2000 Conference</i> , March 18-22, 2000. New Brunswick, New Jersey: IEEE Computer Society, 2000. 8pp.
	(027)	Leigh and Dietz. "DiamondTouch Characteristics and Capabilities." Mitsubishi Electric Research Laboratories, Cambridge, Massachusetts, USA. Undated. 2pp.
+	O28	Magerkurth, Stenzel, and Prante. "STARS - A Ubiquitous Computing Platform for Computer Augmented Tabletop Games." 5 th International Conference on Ubiquitous Computing (Ubicomp '03), October 12-15, 2003, Seattle, Washington. 2pp.
+	O29	Malandain, Grégoire. "Connected Components Extraction." Available http://www-sop.inria.fr/epidaure/personnel/malandain/segment/connexe.html . Printed 12/18/2003. 3pp.
	O30	Matsushita and Rekimoto. "HoloWall: Designing a Finger, Hand, Body, and Object Sensitive Wall." UIST '97 Banff, Alberta, Canada. © 1997 ACM 0-89791-881-9/97/10. pp. 209-210.
	(031)	Missouri Department Of Revenue. "2D Barcode Technology." Undated. 3pp.
+	032	Moran, Saund, van Melle, Gujar, Fishkin, and Harrison. "Design and Technology for Collaborage; Collaborative Collages of Information on Physical Walls." <i>UIST '99</i> . Asheville, NC. © 1999 ACM 1-58113-075-9/99/11, CHI Letters vol 1, 1. pp. 197-206.
 	O33	Pangaro, Maynes-Aminzade, and Ishii. "The Actuated Workbench: Computer-Controlled Actuation in Tabletop Tangible Interfaces." <i>Proceedings of UIST 2002</i> , October 27-30, 2002. © 2002 ACM. 10pp.
	O34	Paradiso, Hsiao, Strickon, Lifton, and Adler. "Sensor systems for interactive surfaces." <i>IBM Systems Journal</i> , Vol. 39, Nos. 3&4, 2000. pp. 892-914.
-	O35	Patten, Ishii, Hines, and Pangaro. "Sensetable: A Wireless Object Tracking Platform for Tangible User Interfaces." Proceedings of CHI 2001, March 31-April 5, 2001, ACM Press, © 2001 ACM. 8pp.
-	O36	Patten, Recht, and Ishii. "Audiopad: A Tag-based Interface for Musical Performance." Proceedings of Conference on New Interface for Musical Expression (NIME '02). Dublin, Ireland, May 24-26, 2002. 6pp.
	O37	Ramos and Balakrishnan. "Fluid Interaction Techniques for the Control and Annotation of Digital Video." <i>UIST '03</i> Vancouver, B.C., Canada. © 2003 ACM 1-58113-636-06/03/0010. pp. 105-114.
+-	O38	Rekimoto and Ayatsuka. "CyberCode: Designing Augmented Reality Environments with Visual Tags." <i>Proc. of UIST 2000</i> , 2000. 10pp.
+	O39	Rekimoto and Matsushita. "Perceptual Surfaces: Towards a Human and Object Sensitive Interactive Display." Proceedings of Workshop on Perceptural User Interactes (PUI'97), 1997. 3pp.
<u></u>	O40	Rekimoto and Nagao. "The World through the Computer: Computer Augmented Interaction with Real World Environments." <i>Proceedings of UIST'95</i> , 1995. pp. 29-36.
+	O41	Rekimoto and Saitoh. "Augmented Surfaces: A Spatially Continuous Work Space for Hybrid Computing Environments." <i>CHI '99</i> , 15-20 May 1999. Pittsburgh, Pennsylvania. © ACM 1999 0-201-48559-1/99/05. pp. 378-385.
	O42	Rekimoto, Jun. "Matrix: A Realtime Object Identification and Registration Method for Augmented Reality." Proc. of Asia Pacific Computer Human Interaction (APCHI '98), 1998. 6pp.
	O43	Rekimoto, Jun. "Multiple-Computer User Interfaces: 'Beyond the Desktop' Direct Manipulation Environments." ACI CHI2000 Video Proceedings, 2000. 2pp.
<u> </u>	O44	Rekimoto, Jun. "Pick-and-Drop: A Direct Manipulation Technique for Multiple Computer Environments." Proceedings of UIST'97, 1997. pp. 31-39.

*Examiner Initial	Document No.	Document Information
<u>/YH/</u>	O45	Rekimoto, Jun. "SmartSkin: An Infrastructure for Freehand Manipulation on Interactive Surfaces." <i>CHI 2002</i> , April 20-25, 2002, Minneapolis, Minnesota. © 2001 ACM 1-58113-453-3/02/0004. 8pp.
	O46	Rekimoto, Ullmer, and Oba. "DataTiles: A Modular Platform for Mixed Physical and Graphical Interactions." SIGCHI'01, March 31-April 4, 2001, Seattle, WA. © 2001 ACM 1-58113-327-8/01/0003. 8pp.
	O47	Reznik, Canny, and Alldrin. "Leaving on a Plane Jet." 2001 Int. Conf. on Intell. Robots & Systems (IROS), Maui, Hawaii, October 2001. 6pp.
	O48	Ringel, Gerh, Jin, and Winograd. "Barehands: Implement-Free Interaction with a Wall-Mounted Display." Short Talks. CHI 2001 31 March - 5 April. Pp. 367-368.
	O49	Rosenfeld, Zawadzki, Sudol, and Perlin. "Planar Manipulator Display." New York University mrl. NYU Media Research Lab. Available http://cat.nyu.edu/PMD . Printed 5/16/2004. 3pp.
	O50	Rovani, David (Posted by). "My Second Month with the Compaq Tablet." <i>Home>Reviews, TablePCHome.com</i> - <i>Table PC user community</i> . Posted 4/10/2003. Available http://www.tabletpchome.com/Messages.aspx?ThreadID=140. Printed 12/30/2003. pp. 1-2 of 5.
	O51	Schmalstieg, Encamação, and Szalavári. "Using Transparent Props for Interaction With The Virtual Table." Presented at 1999 ACM Symposium on Interactive 3D Graphics (13DG '99). April 26-28, 1999, Atlanta, GA. 7pp.
	O52	Scott, Grant, and Mandryk. "System Guidelines for Co-located collaborative Work on a Tabletop Display." Proceedings of ECSCW'03, European Conference Computer-Supported Cooperative Work 2003, Helsinki, Finland, September 14-18, 2003. 20pp.
	O53	Shen, Everitt, and Ryall. "UbiTable: Impromptu Face-to-Face Collaboration on Horizontal Interactive Surfaces." Mitsubishi Electric Research Laboratories, Inc., 2003. Cambridge, Massachusetts. TR-2003-49. September 2003. 10pp.
	O54	Shen, Lesh, and Vernier. "Personal Digital Historian: Story Sharing Around the Table." <i>Interactions</i> . March + April 2003. pp. 15-22.
1	O55	Shen, Lesh, Bernier, Forlines, and Frost. "Sharing and Building Digital Group Histories." CSCW'02, November 16-20, 2002, New Orleans, Louisiana. © 2002 ACM 1-58113-560-2/02/0011. 10pp.
<u>~</u>	O56	Shen, Lesh, Moghaddam, Beardsley, and Bardsley. "Personal Digital Historian: User Interface Design." Mitsubishi Electric Research Laboratories, Inc. 2001. Cambridge, Massachusetts. 5pp.
<u>₹</u> /YH/	057	Shen, Vernier, Forline, and Ringel. "DiamondSpin: An Extensible Toolkit for Around-the-Table Interaction." CHI 2004, April 24-29, 2004, Vienna, Austria. © 2004 ACM 1-58113-702-8/04/0004. 8pp.
	O58	SMART Technologies Inc. White Paper. "DViT Digital Vision Touch Technology." February 2003. 10pp.
	O59	Smart Technologies, Inc. "Rear Projection SMART Board TM Interactive Whiteboard" "SMART Board Software". Available http://www.smarttech.com/Products/sbsoftware/index.asp . Printed 12/16/2003. 5pp. total.
	O60	Starner, Leibe, Singletary, Lyons, Gandy, and Pair. "Towards Augmented Reality Garning." Available http://www.gvu.gatech.edu/ccg/publications/imagina2000/ . Printed 12/30/2003. 27pp.
	O61	Streitz, Geißler, Holmer, Konomi, Müller-Tomfelde, Reischl, Rexrogh, Seitz, and Steinmetz. "i-LAND: An interactive Landscape for Creativity and Innovation." <i>Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI'99)</i> , Pittsburgh, Pennsylvania, May 1520, 1999. ACM Press, New York. Pp. 120-127.
+	O62	Symanzik, Jürgen. "Three-Dimensional Statistical Graphics Based On Interactively Animated Anaglyphs." Published 1993. Available http://citeseer.mj.nec.com/95667.html . Printed 2/25/2004. 7pp. total.
<u></u>	O63	"The Tablet PC A detailed look at Microsoft's proposed Tablet PC." Pen Computing Magazine: Tablet PC. Available http://www.pencomputing.com/frames/textblock_tablet_pc.html . Printed 12/30/2003. pp. 1

*Examiner Initial	Document No.	Document Information
<u>/YH/</u>	O64	Tandler, Prante, Müller-Tomfelde, Streitz, and Steinmetz. "ConnecTables: Dynamic Coupling of Displays for the Flexible Creation of Shared Workspaces." <i>Proceedings of the 14. Annual ACM Symposium on User Interface Software and Technoic (USIT'01)</i> , ACM Press (CHI Letters 3 (2)), 2001, pp. 11-20 (10pp).
	O65	Ullmer and Ishii. "The metaDESK: Models and Prototypes for Tangible User Interfaces." <i>Proceedings of UIST'97</i> , October 14-17, 1997. © 1997 ACM - ACM 0-89791-881-9/97/10. 10pp.
-	O66	Ullmer, Ishii, and Glas. "mediaBlocks: Physical Containers, Transports, and Controls for Online Media." Computer Graphics Proceedings (SIGGRAPH'98), July 19-24, 1998, © 1998 ACM. ACM-0-89791-999-8-8/98/007. 8pp.
+	O67	Ullmer, Ishii, and Jacob. "Tangible query Interfaces: Physically Constrained Tokens for Manipulating Database Queries." Proc. INTERACT 2003 Conference, 2003. 1 lpp.
	O68	Underkoffler and Ishii. "Illuminating Light: An Optical Design Tool with a Luminous-Tangible Interface." Proceeding of CHI '98, April 18-23, 1998, © 1998 ACM. pp. 1-8.
	O69	Underkoffler and Ishii. "Urp: A Luminous-Tangible Workbench for Urban Planning and Design." <i>Proceedings of CHI '99</i> . May 15-20, 1999. © 1998 ACM. pp. 1-8.
	O70	Underkoffler, Ullmer, and Ishii. "Emancipated Pixels: Real-World Graphics in the Luminous Room." Proceedings of SIGGRAPH '99, August 8-13, 1999, © 1999 ACM. 8pp.
	O71	Vernier, Lesh, and Shen. "Visualization Techniques for Circular Tabletop Interfaces." To appear in <i>Advanced Visual Interfaces</i> , May 2002, Trento, Italy. © 2002 Mitsubishi Electric Research Laboratories, Inc. MERLTR2002-01. Authored March 2002. 10pp.
	O72	Viola and Jones. "Robust Real-time Object Detection." Cambridge Research Laboratory, Technical Report Series. Compaq. CRL 2001/01, February 2001. 30pp.
	O73	"VIRTUALBOARD." Available http://visilab.unime.it/visilab/virtualboard.htm. Printed 12/16/2003. 6pp.
-	O74	Von Hardenberg and Bérard. Bare-Hand Human-Computer Interaction." PUI 2001 Orlando, FL, ©2001 ACM 1-58113-448-7-11/14/01. 8pp.
+	O75	Wellner, Pierre. "Interacting with Paper on the DigitalDesk." Communications of the ACM. July 1993. EuroPARC tech report EPC-93-195. 17pp.
+	O76	Whalen, Tara. "Playing well with Others: Applying Board Game Design to Tabletop Display Interfaces." <i>UIST</i> 2003. Vancouver, November 2-5, 2003, 3pp.
<u> </u>	077	Wu and Balakrishnan. "Multi-Finger and Whole Hand Gestural Interaction Techniques for Multi-User Tabletop Displays." UIST '03, Vancouver, B.C., Canada. © 2003 ACM 1-58113-636-6/03/0010. pp. 193-202.

/Yubin Hung/	09/13/2007
Signature	Date

RMA:klp 9/22/04

Examiner's

^{*}Examiner: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. § 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Number 10814761 Filing Date 2004-03-31 INFORMATION DISCLOSURE First Named Inventor Andrew D. Wilson STATEMENT BY APPLICANT Art Unit 2624 (Not for submission under 37 CFR 1.99) **Examiner Name** Yubin Hung Attorney Docket Number 13768.810.69

U.S.PATENTS								
Examiner Initial*	Cite No			Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear		
/YH/	1	6128003		2000-10-03	Smith	/		
	2	6529183		2003-03-04	MacLean			
	3	6614422		2003-09-02	Rafii			
	4	6720949		2004-04-13	Pryor			
	5	7084859		2006-08-01	Pryor			
	6	5483261		1996-01-09	Yasutake			
	7	6266061		2001-07-24	Doi			
\downarrow	8	6522395		2003-02-18	Barnji			
If you wish	to ad	ld additional U.S. Pate	ent citation	n information p	lease click the Add button.			

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number		10814761		
Filing Date		2004-03-31		
First Named Inventor	Andr	ew D. Wilson		
Art Unit		2624		
Examiner Name	Yubir	n Hung		
Attorney Docket Number		13768.810.69		

	,		U.S.P	ATENT	APPLI	CATION PUB	LICATIONS		
Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publica Date	ation	Name of Pat of cited Docu	entee or Applicant ument	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	
/YH/	1	20060010400		2006-01	I-12	Dehlin			
2 200502		20050245302	A1	2005-11	2005-11-03 Bathiche				
	3 20050281475 A1		A1	A1 2005-12-22		22 Wilson			
	4	20050277071	0050277071 A1 2005-12-15		Yee				
	5	20010012001		2001-08	3-09	Rekimoto			
	6	20040196371	20040196371 A1 2004-10-07		Kono				
	7 20040090524 A1 2004-05-13		Belliveau						
\downarrow	8 20030161524 2003-08-28		King						
f you wisl	to ac	ld additional U.S. Publi				·····		button.	
· · · · · · · · · · · · · · · · · · ·			<u> </u>	FUKER	I AY NE	ENT DOCUM	ENIS	15. 0	
Examiner nitial*	Cite No	Foreign Document Number ³	Country Code ²		Kind Code⁴	Publication Date	Name of Patentee Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number		10814761		
Filing Date		2004-03-31		
First Named Inventor	Andre	ew D. Wilson		
Art Unit		2624		
Examiner Name	Yubin	ı Hung		
Attorney Docket Number		13768.810.69		

1	YH/	1	9819292 WO			1998-05-07	Gabriel Ilan			
		2	0690407 EP			1996-01-03	Kaisha Kaushiki Canon			
		3	27656077	FR		1998-05-22	Michel Cartant			
If yo	u wis	h to a	dd additional Foreign P	atent Document	citation	information pl	ease click the Add buttor	ו		
		·		NON-PATEN	NT LITE	RATURE DO	CUMENTS			
Exa Initia	niner Is*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.							
		1	Office Action mailed August 30, 20007 cited in related application no. 10/870,777.							
		2	Office Action mailed June 29, 2007 cited in related application no. 10/834,675.							
		Pavlidis, Ioannis, et al. "A Vehicle Occupant Counting System Based on Near-Infrared Phenomenology and Fuzzy Neural Classification", IEEE Transactions on Intelligent Transportation System, New York, NY, Vol. 1, No. 2., June 2000, pp.78-80.								
		4	Kijma, Ryugo, et al. "Distributed Display Approach Using PHMD with Infrared Camera", Proceedings of the IEEE Virtual Rality, Orlando, Florida, March 24-28, 2002. pp. 1-8.							
\		5	HARDENBERG VON. C Interaction", Berlin, July 2	HRISTIAN, "Fingel 20, 2001.	rtracking	and Handpostu	ure Recognition for Real-Tir	n Human-Computer		
If you	you wish to add additional non-patent literature document citation information please click the Add button									